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AND

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A NEW NOCTUID.

By R. OTTOLENGUI.

Thyatira rectangulata nov. sp.—Pattern essentially that of *T. scripta* (America) and *T. derasa* (Europe), except that in the course of the t. a. line a sharply defined right angle occurs; hence the name. This seems to be a specific character, as in *derasa* the line is practically straight, whilst in *scripta* there is a slight bend at the point where the right angle occurs in *rectangulata*. Other differences are as follows:

Color.—The ground color is the same in all three species, lightest in *derasa*, and darkest in *rectangulata*. The maculation in *derasa* is creamy white with a deep yellowish cast through the central third of the primaries. In *scripta* there is a pinkish hue to the white markings, and, with a number of specimens before me, it is evident that there is a yellowish reflection through the central third of primaries, a shade which is entirely absent in *rectangulata*, the markings of which are bright pink. In fact, both in color and pattern (with one exception), *scripta* seems more nearly allied to *derasa*, than it is to *rectangulata*.

Subterminal line.—In *scripta* and *derasa* the s. t. line is a distinct white band, well defined along both edges, extending uninterruptedly from apex to outer angle. In *rectangulata* the line is narrow, sharply dentate outwardly; inwardly fading away and blending with the ground color; it is narrowed or broken near the angle.

Subterminal space.—The subterminal space in all three species is

crossed by a series of sharply curved, parallel, black lines. In *scripta* four distinct lines are present, while in *derasa* and *rectangulata* the innermost line is entirely absent or very faintly suggested.

Types.—Two males and two females. Collection of the author.

This species, which I have at length decided to be distinct, was taken by me during my first year of collecting, and during the Spring and Autumn of each succeeding year. For a time I had my Brooklyn specimens labeled *T. scripta*, but when I visited White Mountains and took the genuine *scripta* in that region, I at once suspected that the Brooklyn form was at least a local race. The late Mr. Neumoegen suggested to me that, being double brooded, the broods might vary, but I disproved this by showing him living specimens in May, and in the following August, both being taken in Brooklyn, and exactly alike. At various times I have had about eighty specimens taken in Brooklyn, and the characters differing from the other species have been uniformly present in them all. I have also seen the same form taken by Mrs. Herring, in Plainfield, N. J., while specimens from the Catskills, the Adirondacks and the White Mountains, as well as from Canada, have all been typical *scripta*. I say "typical" *scripta*, because though Gosse's description is really no description at all, his figure is very distinctly the same insect as that taken in the high altitudes and in the North. In Bulletin 44, U. S. National Museum, Prof. Smith says: "In the Edwards collection there is an Alaskan specimen, and in the British Museum one from Hudson Bay territory, which indicate a new species. They are much darker in color, and in the course of the t. a. line agree with *derasa* rather than with *scripta*." This statement is puzzling. I cannot find any Alaskan specimen in the Edwards collection, nor was such a specimen known to the present curator, Mr. Beutenmüller. Aside from the typical *scripta*, I found a specimen of what I now call *rectangulata*, but that was presented to Mr. Edwards by me, and was taken in Brooklyn. Whether an Alaska label was temporarily upon the pin when Prof. Smith saw it I cannot tell, but even in that case, though *rectangulata* is "much darker in color," it by no means approaches *derasa* in the course of the t. a. line. Then the British Museum specimen adds to the mystery, for I should not look for *rectangulata* so far North, though of course it may occur there, if as I suspect, it is a true species, and not merely a local race of *scripta*.

LEPIDOPTERA IN SOUTH DAKOTA.

By P. C. TRUMAN, Volga, S. Dak.

(Continued from p. 299, vol. vii).

RARE.

Argynnis aphrodite
" alcestis
" bellona
Grapta progne
Vanessa milberti
Pyrameis huntera
Junonia cœnia
Apatura proserpina
Thecla litus
Chrysophanus dione
Lycæna pseudargiolus
Nathalis iole
Anthocharis olympia
Colias eriphyle
" philodice
Ancyloxypha numitor
Pamphila massasoit
" uncas
" huron
" cernes
" delaware
Deilephila chamænerii
Philampelus achemon
Ampelophaga myron
Protoparce celeus
" carolina
Sphinx drupiferarum
" gordius
" vancouverensis
Triptogon modesta
Smerinthus geminatus
Eudryas unio
" grata
Lycomorpha pholus
Callimorpha suffusa
Arctia virgo
" parthenice
Spilosoma latipennis
" antigone
Euchætes oregonensis
Nadata gibbosa
Gluphisia trilineata
Telea polyphemus
Hepialus argenteomaculatus
Arsilonche albovenosa
Acronycta occidentalis
" lobeliæ
" insita
" brumosa
" superans
" connecta
" hamamelis
" sperata
" oblinita
Harrisimemna trisignata
Microcœlia diphtheroides
Peridroma incivis
Noctua c-nigrum
" plecta
" haruspica
Chorizagrotis auxiliaris
" introferens
" agrestis
Porosagrotis murænula
Carneades verticalis
" tessellata
Mamestra lustralis
" subjuncta
" grandis
" latex
" adjuncta
" lilacina
" goodelli
" renigera
" obscura
Hadena niveivenosa
" apamiformis
" cariosa
" leucoscelis
" indirecta
" mactata
" miseloides

Hadena fractilinea
Trachea delicata
Oligia grata
Hyppa xylinoides
Euplexia lucipara
Helotropha atra
Hydrœcia obliqua
" nebris
Monodes nucicolora
Caradrina meralis
Pyrophila glabella
Tæniocampa oviduca
Pyrrhia angulata
Orthosia ferruginoides
Xanthia flavago
Xylina disposita
" bethunei
" laticinera
" pexata
" carbonaria
Calocampa nupera
" curvimacula
Cucullia intermedia
Ogdoconta cinereola
Abrostola urentis
Plusia ærea
" biloba
Plusiodonta compressipalpis
Heliothis rhexia
" dipsaceus
" scutosus
Erastria albidula
" concinnimacula
" synochitis
" muscosula
Catocala grynea
" cratægi
" abbreviatella
" clintonii
" cerogama
" adriana
" stretchii
" cara
" nurus

Strenoloma lunilinea
Phurys vinculum
Homopyralis discalis
Herminia morbidalis
" petrealis
Renia flavipunctalis
Bleptina caradrinalis
Bomolocha deceptalis
Tetracis crocallata
Caberodes confusaria
" majoraria
" cayennaria
Endropia serrata
Sicya macularia
Eucrostis chloroleucaria
Acidalia quadrilineata
Semiothisa enotata
" dislocaria
Phasiane mellistrigata
" trifasciata
" irrorata
Thamnonoma subcessaria
" flavicaria
Caterva catenaria
Boarmia crepuscularia
Eubyia cognataria
Phibalapteryx latirupta
Petrophora testata
" diversilineate
Rheumaptera unangulata
Pyrausta oxdydalis
Schœnobius clemensellus
Crambus coloradellus
" interminellus
" bistriatellus
Oxyptilus periscelidactylus
Amorbia humerosana
Dichelia sulfureana
Sericoris constellatana
Pædisca scudderiana
" dorsisignatana
Carpocapsa pomonella

VERY RARE.

Argynnis edwardsii
Grapta j-album
Vanessa californica
Chionobas varuna
Libythea bachmani
Lycæna isola
Meganostoma cæsonia
Papilio turnus
" cresphontes
" philenor
Cystineura amymone
Pamphila viator
Nisoniades brizo
" juvenalis
Protoparce cingulata
Trochilium fraxini
Utethesia bella
Pheosia rimosa
Nerice bidentata
Edema albifrons
Schizura ipomeæ
Tolype velleda
Hepialus argentata
Chytonix palliatricula
Noctua lubricans
Agrotis atricincta
Hadena auranticolor
Hydrœcia purpurifascia
" necopina
Scopelosoma devia
Cucullia montanæ
Schinia nundina
" arcifera
Melicleptria sueta
Acontia aprica
Chamyris cerintha
Erastria apicoca
Melipotis nigrescens
Catocala relicta
Erebus odora
Metrocampa perlaria
Probole aliearia
Psammatodes eremiata
Pantographa limata
Orneodes hexadactyla

But of these *Grapta j-album*, *M. cæsonia*, *P. cresphontes*, *P. philenor* and *E. odora* were undoubtedly travel-worn wanderers. And beside these I have taken nearly fifty species which are yet unnamed, mostly for the reason that they are too rare to risk sending to be named. The field is by no means exhausted, for each year adds species not found here before.

———o———

RHOPALOCERA OF RIVERSIDE, CALIFORNIA.

By F. D. Twogood.

In the May number of the News, Mr. Albright gives a partial list of the Lepidoptera taken at Santa Monica and vicinity. I find it varies in many respects from the list taken here, especially the butterflies. Santa Monica is on the coast and Riverside fifty miles inland in a narrow valley with mountains on all sides.

Within a radius of five miles of Riverside, which includes a small mountain (Rubidoux, 1800 feet above sea level and 1000 feet above Main Street), the river bottoms and Riverside proper

which has little less than citrus fruits with an occasional alfalfa patch, the species as given below have been taken by myself during the last five years.

In determining specimens I am under obligations to Mr. H. C. Fall, of Pomona; Mr. Wright, of San Bernardino, and Dr. Skinner, of Philadelphia.

Danais archippus Fab.—Not common; March to November. Food-plant milkweed.

D. berenice?—Rare; several specimens seen June last, but none taken.

Agraulis vanillæ Linn.—Abundant; taken all times of the year, common from April to January. Food-plant, passion vine.

Melitæa chalcedon Db.-Hew.—Abundant on Rubidoux; April and May.

M rubicunda Hy.-Edw.—Common on Rubidoux; March and April.

M. gabbii Behr.—Rare; four specimens taken in the river bottoms the latter part of April, 1895.

Phycoides mylitta Edw.—One specimen taken September last.

Grapta satyrus Edw.—Rare; March and April. Food-plant elm.

Vanessa antiopa Linn.—Common; taken in February, June and November. Food-plants; willow and elm.

V. californica Bdv.—Very rare; August in the river bottoms.

Pyrameis atalanta Linn.—Rare; taken on Rubidoux February, March and April.

P. huntera Fab.—Rare; March to September.

P. cardui Linn.—Abundant the year around.

P. carye Hbn.—Common; April to September.

Junonia cœnia Hbn.—Rare; January to October.

Limenitis lorquini Bdv.—Abundant; April to October. Food-plant, willow.

Cœnonympha californica Westw.—Very rare; May and June.

Lemonias virgulti Behr.—Abundant on Rubidoux, April and May.

Calephelis cœnius.

Thecla halesus Cram.—Rare; only taken on Rubidoux, March and April.

T. melinus Hbn.—Common; June to September.

T. dryope Edw.—Rare; April to September.

Thecla iroides Bdv.—Rare ; several taken in a sheltered spot on Rubidoux ; March, 1894.

T. eryphon Bdv.—Rare ; one taken July 5, '95 in alfalfa field.

D. dumetorum Bdv.—Abundant; March and April on Rubidoux.

Chrysophanus gorgon Bdv.—Rare ; June to September.

C. helloides Bdv.—Common ; March to November.

Lycæna antiacis Bdv.—Rare; taken the latter part of February and during March.

L. acmon Db.-Hew.—Abundant ; March to November, very common during May and June.

L. anna Edw.—Rare ; few taken on Rubidoux in June.

L. pseudargiolus piasus Bdv.—Common; March on Rubidoux.

L. exilis Bdv.—Abundant ; June to September.

L. striata Edw.—Rare ; taken in July.

Pieris protodice Bdv.-Lec.—Common ; has been very common up to last year; since *rapæ* has appeared it has greatly diminished. May and June.

P. rapæ Linn.—Abundant last season ; June to September.

Nathalis iole Bdv.—Rare ; June and July.

Anthocaris cethura Feld.—Common the latter part of April and during May.

A. sara Bdv —Not com. ; taken in the river bottoms during May.

A. sara reakirtii Edw.—Not common ; Spring form of *sara* taken in the river bottoms, March and the first of April.

Meganostoma eurydice Bdv.—Rare ; taken on Rubidoux, March and April.

Colias eurytheme Bdv.—Abundant ; taken the year around. The alba form taken occasionally.

C. hardfordii.—Rare ; July and August.

Terias nicippe Cram.—Rare ; two specimens, one on Rubidoux in Arpil '92, the other May '95.

Papilio eurymedon Bdv.—Rare; one specimen taken Aug. '95.

P. rutulus Bdv.—Common in the river bottoms, Feb. to Oct.

P. zolicaon Bdv.—Rare ; a few taken on top of Rubidoux the latter part of February and during March.

Copæodes candida Wright.—Taken in the river bottoms March to May. Very rare.

Pamphila nemorum Bdv.—Not common ; Rubidoux, April and May.

P. agricola Bdv.—Rare; Rubidoux, May and June.

P. campestris Bdv.—Abundant, March to December.

P. phylæus Dru.—Common, June, July and August.

P. brettus brettoides Edw.—Rare; March to June.

P. sabuleti Edw.—Rare; Rubidoux February and March. Two others not named.

Pyrgus ericetorum Bdv.—Rare; taken on the side of Rubidoux during May, one female.

P. tessellata Scud.—Common everywhere, March to November.

Nisoniades persius Scud.—Common in the river bottom; June and July.

N. tristis Bdv.—Common about the mints July and August.

Pholisora catullus Fabr.—Very rare; two specimens taken in May.

———o———

THE PRESENT STATUS OF PARAPOMPILUS Cresson (non Smith).

By WILLIAM J. FOX.

Until within a few years considerable confusion has existed in the assignment of our Pompilidæ to their proper genera; and as there is yet, apparently, varying opinions regarding the nomenclature of certains groups, it has seemed advisable to discuss the position of *Parapompilus* Cresson (non Smith), the subject of which has been opened by a recent short article in these columns.*

In Cresson's monograph of the Pompilidæ published in 1867, that author describes and refers, with ambiguity three species of *Pompilus*,—*P. ? mariæ*, *? legatus* and *? elegans*. Later, 1869, he described from Mexico, a *Ferreola lævifrons*, and in 1872, we have *contiguus*, *texanus* and *vicinus*, brought to light by the same author and referred to *Parapompilus* Smith, as are also *Ferreola lævifrons* and *Pompilus ? legatus*. *Pompilus ? mariæ* we find under *Parapompilus*, in Cresson's "Synopsis" published in 1887. In the foregoing we have what has been known as *Parapomilus* Cresson. To this list must be added my *Planiceps planatus* and *Ferreola sanguinea* Smith.

All of these form a fairly well marked group of species characterized by their flat heads, plate-like clypeus, ample wings, three

* See a note by W. Hampton Patton in ENTOMOLOGICAL NEWS, October, 1896, p. 248.

submarginal cells, basal vein interstitial, cubital vein of hind wings originating distinctly beyond apex of submedian cell, legs as usual (fore femora not swollen), tarsal claws strongly unidentate within near base, no tarsal comb, elongate pronotum and abdomen compressed apically.

That they are distinct from *Parapompilus* Smith, we see in the ample wings and distinctly unidentate claws, and that the second ventral segment of abdomen is not transversely impressed.

That in the dentate claws they differ from Kohl's Group 17 of *Pompilus* (= *Ferreola*) and in the non-interstitial cubital vein of hind wings and laterally compressed abdomen from Kohl's Group 16 (= *Ferreola*); and in the fact of the middle segment being not emarginate excludes them from Kohl's Group 15 (= *Hominotus* Dhlb. They differ also from *Hominotus* by their dentate claws. With Kohl's Group 18 (= *Pedinaspis*) they agree well.

From *Planiceps* Latr., they differ in the number of marginal cells, non-enlarged fore femora and dentate claws, the ordinary femora and number of submarginals; they are also differentiated from *Aporus*.

The conclusions we reach by these facts are: (1) The species in question do not belong to *Parapompilus* Smith (= *Micropteryx* Lep.*); (2) they cannot be referred to *Ferreola*, *Hominotus* or *Planiceps*; (3) that they are related to Kohl's Groups 15, 16, 17 and 18 (*Hominotus*, *Ferreola* and *Pedinaspis*), and as the description of Group 15 fits them fairly well, *Parapompilus* Cresson, must henceforth stand as *Pompilus* (Gr. *Pedinaspis* Kohl), to which belong the following American species: *lævifrons*, *vicinus*, *planatus*, *texanus*, *sanguineus*, *mariæ* and *legatus*.

Neither *Parapompilus* or *Pompilus* (Gr. *Ferreola*) occur as yet in the United States.

In a later paper,† Herr Kohl has reached the same conclusion regarding *Parapompilus* Cresson, and unites as one Group *Pedinaspis*, *Parapompilus* Cress., and *Planiceps*. It is preferable, in my opinion, to retain *Planiceps* as at least a Group of *Pompilus*.

* Kohl points out that the name was used for a genus in Lepidoptera prior to its adoption by Lepelitier de St. Fargeau, consequently Smith's name must stand.

† Verh. zool. bot. Gesell. xxxvi, 3, 1886.

PINODYTES HAMILTONI AND ANTHICUS FORMICARIUS.

By JOHN HAMILTON, M.D.

Pinodytes hamiltoni *Horn.*—This species, which is blind, was discovered in December, 1872, though not described till 1892. The first example occurred about a foot under ground beneath a large impacted boulder in a wild mountainous place; from its pale color and remarkable swiftness it was mistaken for a young roach and its companions, of which there were several, were permitted to escape. In June of the following year a dead specimen was found on a woody hill-side that had been mowed over; no others have been taken by myself.

Rev. P. Jerome Schmitt permits me to say that altogether he has taken six examples at six different times—four by sifting layers of decaying leaves from Chestnut Ridge, one under a stone and one under bark on a log. These all occurred during the Winter months, but the insect was not sought for in this way during the Summer.

Mr. H. G. Klages took six examples, two of them several years ago, in June, and four in November of last year; these last were found under the bark of a gum (*Nyssa*) log with *Cucujus clavipes* which discloses at that season, many of the pupa dying during the process. These are all that are known to me to have occurred till a recent lucky find by Mr. Geo. H. Ehrman.

On the 21st of November, Mr. Erhman succeeded in capturing twelve examples under circumstances that furnished a clew to the habits of the mature beetle. On the side of a wild mountain ravine in a humid place on overturning a log he discovered a large dead larva, seemingly Elaterid, in and around which he took the number mentioned. At first sight they were thought to be young roaches, but the mistake was discovered in time so that the whole colony was captured.

From the foregoing it is evident that the species is gregarious and carnivorous, apparently occurring oftener in Winter than in Summer, and in woody, hilly, uncultivated places. Conjecturally, from its pallid color, absence of eyes and conditions under which found, it seems in habit either subterranean or semi-subterranean, its presence under bark being that of a scavenger. The larvæ are probably wholly subterranean, subsisting on the dead larvæ and pupæ of the numerous insects which inhabit beneath the

ground during immaturity, and when discovered will probably prove to be eyeless.

The above narrative is given with the view that collectors may look for this beetle more understandingly. It may be wide spread and not so rare as it seems at present. The likelihood, from its pale color and extreme activity, of being mistaken for a colony of young roaches should be borne in mind.

Anthicus formicarius *Goeze*, *formicoides* Geoff., *basilaris* Say, *quisquilius* Thoms., *Hemantus enodis*, *scenicus*, *? rixator* Casey. It seems that Captain Casey, in his monograph of the Anthicini (Ann. N. Y. Acad. Nat. Sci., Sept. 1895), not having seen European examples of either *floralis* or the present species, doubted the identity of the former and ignored all reference to the latter, which course furnished material for, to him, two, perhaps three new species.

Like as myself, in the first edition of the Coleoptera, common to America and Europe, he committed the error of uniting *basillaris* with *floralis*, but seems to have disregarded, or not to have noticed the correction made by Mr. A. Fauvel ("Revue d'Entomol" viii, 155), and embodied in my second edition (l. c.).

This of course left formicarius *Geoze*, *basilaris* Say, undescribed. Like many other widely distributed species this, besides the inevitable individual differences, is subject to some slight geographical variation; the form from Southern California is a little paler and has slightly finer general punctuation than examples from Canada. Examples from Europe seem to be absolutely identical with the California form, which is Captain Casey's *Hematus enodis* as determined by description; this does not differ in any essential structure from the Atlantic coast form, which is undoubtedly *H. scenicus* Casey; *H. rixator* Casey from the New Mexican region differs so little by description as to be doubtfully distinct, though a want of specimens prevents absolute positiveness. I find, from the examination of numerous European and American forms, that the characters chiefly designated by Mr. Casey to separate his species are individually intercurrent, inconstant, and cannot safely be used for that purpose, a condition that could scarcely have been overlooked with more plentiful material. For some antecedent remarks on this species see ENT. NEWS, vii. 70.

American habitat, so far as personally known, Southern California, Florida, Massachusetts, Canada (Ontario).

I cannot follow Captain Casey in splitting *Anthicus* into ten genera with meaningless barbaric names; these so-called genera are simply groups convenient for the purpose of analysis and nearly all previously recognized by various authors. In a catalogue these groups may properly be noted by xxx, or as in the European, designated by numerals.

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NEWS AGENTS.

QUITE a number of our subscribers get the NEWS through news and book agencies and they give us considerable trouble. These agencies all expect a discount and we publish the NEWS at such a low rate that we cannot afford to give them a percentage. It would be much better if our friends would send us their subscription money direct. It is doubtless an advantage for institutions to subscribe through an agency, but it can hardly save the individual any trouble. We have had subscribers inform us that they have not received the NEWS, and in some cases it has been because we have not received the money for the subscription, and as we expect the money in advance, such copies have not been sent out. Those who have not sent in their subscriptions for the present year will kindly do so and greatly oblige us.

IT is said there is nothing new under the sun. This is a mistake, as we have just received some Coleoptera, to name, put up in gelatin capsules. Each end of the capsule has a little cotton in it and the beetle is between and can be seen and examined through this transparent material. What next?

DEPARTMENT OF ECONOMIC ENTOMOLOGY.

Edited by Prof. JOHN B. SMITH, Sc.D., New Brunswick, N. J.

Papers for this department are solicited. They should be sent to the editor, Prof. John B. Smith, Sc.D., New Brunswick, N. J.

Abstract of the Proceedings of the Section on Entomology of the Association Agric. Coll. and Exp. Stations.—At the meeting of the A. A. A. C. and E. S. held in Washington, Nov. 10–13, 1896, the Section on Entomology presented an interesting and valuable program. Dr. Otto Lugger, of Minnesota, occupied the chair, and in the absence of the secretary-elect, Mr. W. G. Johnson, of Maryland, was elected temporarily to the position.

The need of better legislation against noxious insects, the manufacture and sale of bogus insecticides, were topics that received an extended discussion at the opening session. The report of the committee appointed to consider the matter of legislation against injurious insects was unanimously adopted by the Section and referred to the Executive Committee of the main association, but was not approved. The following resolution was then introduced by Mr. W. B. Alwood, of Virginia, and unanimously adopted by the Section:

WHEREAS, in consideration of the fact of the recent alarming spread of the San José scale in the Atlantic and Middle States, and the further fact that we believe its suppression can only be accomplished by carefully framed laws which should be enacted in the several States, therefore be it

Resolved, 1st. That the Section on Entomology of the American Association of Agricultural Colleges and Experiment Stations endorses the principle of special legislation for the suppression of this pest;

2d. That a committee of ten be created, with Dr. L. O. Howard, Chief of the Division of Entomology, U. S. Department of Agriculture, as chairman, which shall carefully prepare such memoranda as they deem best in relation to legislation dealing with the pest, and when so prepared this matter shall be submitted to the authorities of the several States concerned for such action as the Legislatures thereof may choose to take.

3d. That it is the sense of this Section that State inspection for the control and prevention of the dissemination of this pest upon nursery stock is imperative.

The chair appointed the following committee: L. O. Howard, W. B. Alwood, W. G. Johnson, F. A. Sirrine, J. B. Smith, J. A. Lintner, F. M. Webster, G. G. Groff, A. D. Hopkins and G. H. Powell.

In the absence of the author, Dr. Howard read a paper by Mr. C. F. Baker on "Notes from Auburn, Alabama." In brief, the author reviewed the insects affecting the garden, farm crops, stored grain, and orchard with miscellaneous notes. He said cotton and corn had been very free from insect injury the present season, the greater part of the damage being done by fungi. The scarity of the boll worm in corn was very conspicuous. A small moth resembling the one becoming injurious to

peach and some varieties of apple in Colorado was bred from peaches. The author was of the opinion that this moth would appear elsewhere soon, as infested fruit was being shipped out of Colorado in considerable quantities.

Mr. F. A. Sirrine read a paper on "Termites (*T. flavipes*) as a Forceing-house Pest." He said these insects were found gnawing the bark from chrysanthemum plants just below the surface of the ground and mining stems in a forceing-house at Floral Park, N. Y., during the month of August, 1896. Bisulphide of carbon was used in destroying the pests, but many plants were also killed by the treatment. Referring to some experiments with cocoons of *Melittia ceto*, the same author said moths could not reach the surface when the cocoons were buried in a sandy loam to a depth of four inches. He also stated that he had bred the potato flee-beetle, *Epitrix cucumeris* from larvæ and pupæ taken in the ground around, what the Long Island growers call "pimply potatoes." The author said Mr. F. C. Stewart had given this subject careful study for the past two years, and that he was of the opinion the pimply condition of the tubers was due to these insects.

Mr. Alwood presented a paper on "The Dissemination of the San José scale in Virginia." He briefly reviewed the original outbreak of the scale in Virginia, stating that only one other point had been located up to the time of the passage of the Virginia scale law. He said that the inspection of nurseries and orchards had been pushed this season, and it is now thought that most of the infected places are known. There are three in the great valley, six in the Piedmont, and six in the tide water. Some of these are nurseries, but it is supposed that all the infested stock has been destroyed. Only two or three places are considered serious. In every instance the pest was introduced upon nursery stock from New Jersey, Maryland, Georgia and Louisiana. The Virginia law has met the approval of the people quite generally, and the powers given the inspector are found to be ample; but the lack of specified funds for clearing up infested premises, where the owners do not realize the importance of immediate action, is considered a bad defect.

(To be continued.)

Notes and News.

ENTOMOLOGICAL GLEANINGS FROM ALL QUARTERS OF THE GLOBE.

[The Conductors of ENTOMOLOGICAL NEWS solicit, and will thankfully receive items of news, likely to interest its readers, from any source. The author's name will be given in each case for the information of cataloguers and bibliographers.]

To Contributors.—All contributions will be considered and passed upon at our earliest convenience, and as far as may be, will be published according to date of reception. ENTOMOLOGICAL NEWS has reached a circulation, both in numbers and circumference, as to make it necessary to put "copy" into the hands of the printer, for each number, three weeks before date of issue. This should be remembered in sending special or important matter for certain issue. Twenty-five "extras" without change in form will be given free when they are wanted, and this should be so stated on the MS. along with the number desired. The receipt of all papers will be acknowledged.—ED.

PICTURE for album of American Entomological Society has been received from Mr. Edw. A. Klages, Crafton, Pa.

Dr. GEO. H. HORN has been seriously ill, but we are glad to state he is much better and out of danger.

DRAGONFLIES IN HOT WATER.—In "The Museum" (a natural science journal published at Albion, N. Y.) for October, 1896, Prof. M. J. Elrod gives some of his experiences in the Yellowstone National Park, as the sixth installment of a series entitled, "Among the Rockies." After describing the Fountain, Excelsior Geyser, Turquoise and Prismatic Lakes, he says: "We had observed in the lakes and in the outlet to the crater [of Excelsior Geyser] numerous dead dragonflies. They had met a sad fate and had come to an untimely end by too close proximity to these hot steam vents. Now these were what we were after, though we had as yet taken none in the Park. There is no law against catching insects or digging plants, so we prepared for action. We soon struck a warm stream along which hundreds of beautiful large red-winged *Libellula saturata* were sporting themselves, and mixed among them were many smaller blue-colored *Mesothemis simplicicollis* var. *collocata*. All the boys took a turn, and that ravine was well swept. The insects were frequently seen depositing eggs in water that was hot to the touch." Then follows a description of *L. saturata*. "The next most noticeable dragonfly to *L. saturata* is *Mesothemis simplicicollis* var. *collocata* Hagen [*not* Say]. It was found in the Park quite abundantly, generally with *L. saturata*. On account of their staying in close proximity to small warm pools and running streams they are not difficult to catch. One could generally straddle the stream and sweep from either side as they went past, or secure a favorable position near a pool and sweep them, while a second party would keep them on the wing. They fly low in the Park, do not take long flights, and by their bright blue bodies are quite conspicuous, though not as much so as *L. saturata*. Quite a number were captured by throwing hats over them, though by such means failures were the rules and captures the exception. Hundreds of these were seen in various pools where the water was too hot for the insects. In some cases they were cooked, and were so soft and unsightly as to be useless as specimens. At first it would appear difficult to account for their presence in these hot pools. From the fact that many males are among the dead it cannot be from an attempt at depositing eggs in water too hot to endure. They undoubtedly are overcome by the escaping steam, smothered and boiled."

THE GIZZARD OF DRAGONFLIES (ODONATA).—Dr. F. Ris, of Mendrisio, Tessin, Switzerland, in an article entitled, "Untersuchung über die Gestalt des Kaumagens bei den Libellen und ihren Larven" (Zoologischer Jahrbücher, ix. Jena, 1896) describes the gizzard of these insects as the terminal portion of the foregut, whose ectodermal cuticle is variously thickened and armed with microscopic teeth arranged in rows or on alternating areas. The presence of such structures in insects so well provided with cutting and biting mouth-parts is explained as necessary, owing to

the fact that the food is "bolted," and therefore an accessory organ for its comminution is required. The orthopterous Locustidæ and Gryllidæ likewise possess a gizzard, whose presence is similarly accounted for, while in the more slowly feeding Acrididæ and Lepidopterous larvæ it is lacking. Confining his studies to the Odonata he finds that, for the larvæ, the Calopteryginæ and some Agrioninæ have the most complexly armed gizzard, the teeth being arranged in 16 longitudinal fields, reduced to 8 in *Lestes*, to 4 in *Gomphus* and *Aeschna*, and to four bilaterally symmetrical *teeth* in *Cordulegaster* and the Libellulidæ. A comparison of larvæ and imagos of the same species shows that a reduction likewise takes place in the individual development, scarcely more than traces of the teeth remaining in the imagos of the Anisoptera. He discusses the phylogeny of the various subfamilies of the Odonata, and on data, drawn in part from his above-described results, modifies Calvert's geneological tree by placing the Cordulegasterinæ as the ancestors of the Cordulinæ and Libellulinæ.

Identification of Insects (Imagos) for Subscribers.

Specimens will be named under the following conditions: 1st, The number of species to be **limited to twenty-five** for each sending; 2d, The sender to pay all expenses of transportation and the insects to become the property of the American Entomological Society; 3d, Each specimen must have a number attached so that the identification may be announced accordingly. Exotic species named only by special arrangement with the Editor, who should be consulted before specimens are sent. Send a 2 cent stamp with all insects for return of names. **Please put date of capture and exact locality on each specimen.** Before sending insects for identification, read page 41, Vol. III. Address all packages to ENTOMOLOGICAL NEWS, Academy Natural Sciences, Logan Square, Philadelphia, Pa.

Entomological Literature.

Under the above head it is intended to note such papers received at the Academy of Natural Sciences of Philadelphia pertaining to the Entomology of the Americas (North and South). Articles irrelevant to American entomology, unless monographs, or containing descriptions of new genera, will not be noted. Contributions to the anatomy of insects, however, whether relating to American or exotic species will be recorded.

1. ANNALES DU MUSEE ROYAL D'HISTOIRE NATURELLE DE BELGIQUE. Tome xii.—Les Arachnides de Belgique par Leon Becker. Deuxieme et Troisiemes parties. Eresidæ, Epeiridæ, Uloboridæ, Theridionidæ, Pholcidæ, Enyoidæ, Agelenidæ, Dictynidæ, Drassidæ, Scytodidæ, Dysderidæ, Avicularidæ.—Chernetes, Opiliones. Brussels, MDCCCXCVI, folio, 378 pp. With an atlas (folio) of 43 colored plates.

2. ZOOLOGISCHER ANZEIGER. Leipsic, Dec. 7, 1896.—Some further remarks on the phylogeny of the orders of Myriapods, C. Verhoeff. On the development of the Pseudoscorpions, J. Tschelkanovzev (in the Mittheilungen).——December 28.—On the mode of breathing in the Hydrachnidæ, A. H. van Vleet, fig. Aphidological communications, N. Cholodkovsky.

3. PROCEEDINGS OF THE ACADEMY OF NATURAL SCIENCES OF PHILADELPHIA, 1896, pp. 547-359.—The Hymenoptera collected by Dr. A. Donaldson Smith in Northeast Africa, W. J. Fox, figs.

4. BULLETIN OF THE AMERICAN MUSEUM OF NATURAL HISTORY, viii, art. xix. New York, December, 1896.—Transformations of some North American hawk-moths, W. Beutenmüller.

5. THE ANNALS AND MAGAZINE OF NATURAL HISTORY. London, December, 1896.—On the habits of *Evania desjardinsii* Blanch., E. Bordage (transl. from Comptes Rendu, Acad. Sci. Paris). On a viviparous Ephemera, M. Causard (from the same). Determination of the directing element in the jaws of insects, J. Chatin (from the same).

6. THE GEOLOGICAL MAGAZINE. London, December, 1896.—Explanation of the plan adopted for preparing an "Index Generum et Specierum Animalium," C. D. Sherborn.

7. BULLETIN No. 36, FLORIDA AGRICULTURAL EXPERIMENT STATION. Jacksonville, Fla., October, 1896.—Insects injurious to stored grain and cereal products, A. L. Quaintance, figs.

8. THE ENTOMOLOGIST'S RECORD.—London, Dec. 15, 1896.—The characters of the eggs of Lepidoptera, as affording a basis for classification, T. A. Chapman.

9. BULLETIN No 39, TEXAS AGRICULTURAL EXPERIMENT STATION. Austin, July, 1896.—The Peach [with a section on injurious insects], R. H. Price, figs.

10. BULLETINS OF THE NEW HAMPSHIRE COLLEGE AGRICULTURAL EXPERIMENT STATION. Durham, N. H. No. 35, May, 1896.—The codling moth and the apple maggot, C. M. Weed, figs.——No. 36, June 1896.—Analysis of three common insecticides, F. W. Morse.——No. 38, August, 1896.—The tent caterpillar, C. M. Weed, figs.——No 39, September, 1896.—The army worm, C. M. Weed, figs.

11. ANNUAL REPORT OF THE PENNSYLVANIA DEPARTMENT OF AGRICULTURE for 1895. [Harrisburg, Pa.], 1896. Part i. Vegetable destruction; its causes and remedies, Prof. R. C. Schiedt. Insects of the year, id., 1 pl.——Part ii. Destruction of the pitch pine forests of Pennsylvania by the pine bark beetle, C. W Johnson, figs.

12. NINETEENTH REPORT OF THE STATE ENTOMOLOGIST on the noxious and beneficial insects of the State of Illinois.—Eighth Report of A. S. Forbes for the years 1893 and 1894. Springfield, Ill., 1896. Pp. 206, 66, v, 13 pls., 4 text figures. Deals with contagious fungus diseases, with special application to the chinch bug, with the ravages of white ants in Illinois, and with the Mediterranean flour moth, this last article by W. G. Johnson.

13. BULLETIN OF THE ILLINOIS STATE LABORATORY OF NATURAL HISTORY. Champaign, Ill. III, art. xv. Synopsis of subfamilies and genera

of the North American Cercopidæ, with a bibliographical and synonymical catalogue of the described species of North America, F. W. Goding. ——IV, art. i–v, 1895.—Bacteria normal to digestive organs of Hemiptera, S. A. Forbes. Description of two new Deltoid moths, G. H. French. Art. vi. On the entomology of the Illinois River and adjacent waters, first paper, C. A. Hart, 15 pls. (All the above received Dec. 29, 1896.)

14. THE QUARTERLY JOURNAL OF MICROSCOPICAL SCIENCE, xxxix, 3. London, November, 1896 —The constitution and development of the society of Termites: observations on their habits; with appendices on the parasitic protozoa of Termitidæ, and on the Embiidæ, Prof. B. Grassi in collaboration with Dr. A. Sandias (transl. from the Italian by W. F. H. Blandford), 5 pls.

15. L'ECHANGE REVUE LINNEENNE. Lyons (France), November, 1896.—Bibliographical and geographical catalogue of the [species of] *Macratria* Newm., M. Pic.

16. REVUE SCIENTIFIQUE. Paris, Dec. 12, 1896.—Mosquitoes of the Isle of Anticosti, P. Combes.

17. OFVERSIGT AF KONGL. VETENSKAPS-AKADEMIENS FORHANDLINGAR, xvii, 8. [Stockholm], 1896.—Some new or imperfectly described Physapoda, F. Trybom.

18. JOURNAL OF THE NEW YORK ENTOMOLOGICAL SOCIETY, iv, 4, December, 1896.—New species of Heterocera from tropical America, W. Schaus. Notes on the transformations of the higher Hymenoptera—i, A. S. Packard, figs. A new *Anisota*, H. G. Dyar. The life-histories of the New York slug caterpillars—iii–vi, id., 4 col. pls.—Additi ns to the list of Long Island spiders, N. Banks. A new species of *Gomphus*, id. A short review of the Chrysomelas of North America, M. Linell. The dog's head butterfly on Staten Island, W. T. Davis. *Diabrotica* in New Mexico, T. D. A. Cockerell. New species of insects taken on a trip from the Mesilla Valley to the Sacramento Mountains, New Mexico, id. Note on *Samia californica*, A. R. Grote.

19. MITTHEILUNGEN DER SCHWEIZERISCHEN ENTOMOLOGISCHEN GESELLSCHAFT, ix, 9. Schaffhausen, November, 1896.—Second supplement to 'Genera and species of my Cetonid collection,' Dr. G. Schoch. On the fauna and habits of the ants of the primeval forest of Colombia, Dr. A. Forel. Fauna Hymenoptera Helvetica (cont.), Dr. A. v. Schulthess Rechberg.

20. PSYCHE. Cambridge, Mass., January, 1897.—Antennal structure of certain Diplosids, E. P. Felt, 1 pl. Notes on New England Acrididæ —iii. Oedipodinæ, 1, A. P. Morse. Description of the botfly of the cotton-tail rabbit in New Mexico, *Cuterebra lepusculi* n. sp., C. H. T. Townsend. Some facts in the life-history of *Hypopta bertholdi* Grote, J.

J. Rivers. Description of the larva of *Hypopta bertholdi*, H. G. Dyar. Note on eggs of *Stagomantis carolina*, S. H. Scudder. *Leucania unipuncta*, C. G. Soule.

21. THE FAUNA OF BRITISH INDIA, including Ceylon and Burma.—moths, vol. iv. By Sir G. F. Hampson, Bart. London, Taylor and Francis, 1896, 8vo., pp. xxviii, 594, 287 figs. Contains the Pyralidæ, with an appendix to the preceding volumes.

22. NOTES FROM THE LEYDEN MUSEUM, xviii, 1, July 15, 1896.—Some new *Heterocerus* from the East Indies and from America, A. Grouvelle. A revision of the genus *Clidicus*, E. Wasmann. Descriptions of new Dryopidæ (Parnidæ) and Helmidæ, A. Grouvelle. Some new *Paussus* from Java, with remarks on the myrmecophilous habits of the Paussidæ, E. Wasmann, fig., 1 pl.

23. TIJDSCHRIFT DER NEDERLANDSCHE DIERKUNDIGE VEREENIGING (2), v, 1. Leyden, 1896. The larval state of *Hypoderma bovis*, P. Koorevaar.

24. ATTI DELLA SOCIETA TOSCANA DI SCIENZE NATURALI, x, 1896.—Contributions to the anatomy of the Gamasidæ—anatomy of *Dermanyssus gallinæ* Redi, F. Neri.

25. LE NATURALISTE CANADIEN. Chicoutimi, December, 1896 —Coleopterological fauna of Manitoba (cont.), G. Chagnon.

26. PROCEEDINGS OF THE AMERICAN PHILOSOPHICAL SOCIETY, xxxv, 152. Philadelphia, November, 1896.—On the second abdominal segment in a few Libellulidæ, M. F. Goddard, 2 pls.

27. THE ZOOLOGICAL RECORD, . . . being Records of Zoological Literature relating chiefly to the year 1895 . . . Edited (for the Zoological Society of London) by D. Sharp. London: MDCCCXCVI. Arachnida 56 pp., Myriapoda 29 pp., R. I. Pocock. Insecta, 387 pp., D. Sharp.

28. NATURGESCHICHTE DER INSECTEN DEUTSCHLANDS.—Coleoptera V, ii, 1, Dr. G. Seidlitz. Berlin, 1896. Alleculidæ.

29. BIOLOGIA CENTRALI-AMERICANA, part cxxxi. London, October, 1896. Received Jan. 5, 1897.—Arachnida Araneidea, pp. 193–208, pl. xxi, O. P. Cambridge. Coleoptera, vol. iii, pt. 1, pp. 553–584, pl. xxiv, G. C. Champion. Lepidoptera Rhopalocera, vol. ii, pp 425–440, pl. lxxxix, F. D. Godman and O. Salvin. Lepidoptera Heterocera, vol. ii, pp. 297–320, pls. lxv–lxvii, H. Druce. Diptera, vol. ii, pp. 313–320, F. M. van der Wulp.

30. PROCEEDINGS OF THE UNITED STATES NATIONAL MUSEUM, xix. Washington, 1896, No. 1102.—Descriptions of new Cynipidous galls and gall-wasps in the United States National Museum, W. H. Ashmead.—No. 1108.—Summary of the Hemiptera of Japan, presented to the United States National Museum by Professor Mitzuri, P. R. Uhler.

31. BULLETIN DE L'ACADEMIE ROYALE DES SCIENCES, DES LETTRES ET DES BEAUX-ARTS DE BELGIQUE (3), xxxii, 11. Brussels, 1896.—How flowers attract insects—experimental researches—ii, F. Plateau, 1 pl.

32. LE NATURALISTE. Paris, Dec. 15, 1896.—*Carpocapsa pomonana*, vulgarly the apple worm, its habits and means of destruction (concl.) M. Decaux, fig.

33. LEPIDOPTERA INDICA. By F. Moore. Part xxvi. London: L. Reeve & Co., 1896. Received Jan. 5, 1897. Pp. 25–48, of vol. iii, pls. 93–205. Nymphalinæ, groups Potamina and Euthaliina.

34. BULLETIN No. 6 (new series) U. S. Dept. of Agriculture. Division of Entomology. Washington, 1896.—Proceedings of the eighth annual meeting of the Association of Economic Entomologists [held at Buffalo, N. Y., Aug. 21, 22, 1896]. The evolution of economic entomology, C. H. Fernald. Some temperature effects on household insects, L. O. Howard. Three years' study of an outbreak of the chinch bug in Ohio, F. M. Webster, maps. A new insecticide [arsenate of lead], A. H. Kirkland. Comparative tests with new and old arsenicals on foliage and with larvæ, C. L. Marlatt. On the futility of trunk and crown washing against the elm-leaf beetle, L. O. Howard. Insecticide soaps, C. L. Marlatt. Scale insects and their enemies in California, J. B. Smith. Notes on some of the insects of the year in the State of New York, J. A. Lintner. Entomological notes from Maryland, W. G. Johnson. Insects of the year in Ohio, F. M. Webster. Some notes on observations in West Virginia on farm, garden and fruit insects, A. D. Hopkins. Notes on new and old scale insects, W. G. Johnson. Notes on the entomological events of the year 1896 in Iowa, H. Osborn. Is coöperation for the control of San José scale practicable, W. B. Alwood. The development of the Mediterranean flour moth, F. H. Chittenden. The grasshopper disease in Colorado, C. P. Gillette. A simple device for the preparation of oil emusions, H. A. Morgan. figs.

35. PROCEEDINGS OF THE ROYAL PHYSICAL SOCIETY. Session 1895–96. Edinburgh, October, 1896.—Note on the occurrence of the larva of the drone-fly (*Eristalis tenax* L.) as a temporary endoparasite in man, J. A. Thomson.

36. BIOLOGISCHES CENTRALBLATT. Leipsic, Dec. 15, 1896.—On the abdominal appendages of insects, Dr. R. Heymons.

37. COMPTE-RENDU. SOCIETE PHILOMATHIQUE DE PARIS, Dec. 12, 1896.—On the presence of calcospherites in the larvæ of Diptera, M. Henneguy.

38. REVUE SUISSE DE ZOOLOGIE ET ANNALES DU MUSEE D'HISTOIRE NATURELLE DE GENEVE, iv, 2, Dec. 28, 1896.—Supplementary note on the genus *Hemimerus*, H. deSaussure, 1 pl. Review of the genus *Tridactylus*, id.

39. MEMOIRS OF THE AMERICAN ACADEMY OF ARTS AND SCIENCES, XII, No. iii. Cambridge [Mass.], December. 1896.—Contributions towards a monograph of the Laboulbeniaceæ [entomogenous fungi], R. Thaxter.

40. THE CANADIAN ENTOMOLOGIST. London, Ont., January, 1897.—The crinkled flannel moth (*Megalopyge crispata* Pack), M. V. Slingerland, 1 pl. Toronto Branch of the Entomological Society of Ontario. *Brephos middendorfi* Men., A. W. Hanham. On the Mexican bees of the genus *Augochlora*, T. D. A. Cockerell. The Coleoptera of Canada, xix, Chrysomelidæ of Ontario and Quebec (cont.), H. F. Wickham, figs. A generic revision of the Hypogymnidæ (Liparidæ), H. G. Dyar. Catalogue of the phytophagous and parasitic Hymenoptera of Vancouver Island, W. H. Harrington.

41. THE ENTOMOLOGIST. London, January, 1897.—Fungi parasitic on butterflies, J. C. Rickard, figs. The senses of insects, G. W. Smith. Descriptive notes on two Coccidæ, T. D. A. Cockerell.

42. THE ENTOMOLOGIST'S MONTHLY MAGAZINE. London, January, 1897.—On *Coccus agavium* Douglas, R. Newstead, figs.

43. BULLETIN No. 33 of the Office of Experiment Stations, U. S Dept. of Agriculture, Division of Entomology, Reprint from. Insects affecting the cotton plant, L O. Howard, Ph.D., figs., 1 pl. Received Jan. 9, '97.

44. MITTEILUNGEN AUS DEM NATURHISTORISCHEN MUSEUM IN HAMBURG, xiii, 1896.—New and little-known scorpions, Dr. K. Kraepelin, 1 pl. The Collembola of the vicinity of Hamburg, Dr C. Schaeffer, 4 pls. Phalangidæ of the vicinity of Hamburg, Dr. K. Kraepelin.

45 THE TRANSACTIONS OF THE ENTOMOLOGICAL SOCIETY OF LONDON for the year 1896, pt. iv, Dec. 18, 1896.—On the classification of three subfamilies of moths of the family Pyralidæ: the Epipaschiinæ, Endotrichinæ and Pyralinæ, Sir G. F. Hampson. Notes on seasonal dimorphism in South African Rhopaloœra, G. A. K. Marshall. On the phylogeny and evolution of the Lepidoptera from a pupal and oval standpoint, Dr. T. A. Chapman. Termites in captivity in England, G. D. Haviland and Dr. D. Sharp.

INDEX TO THE PRECEDING LITERATURE.

The number after each author's name in this index refers to the journal, as numbered in the preceding list, in which that author's paper is published; * denotes that the paper in question contains descriptions of new North American forms.

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Doings of Societies.

PHILADELPHIA, January 12, 1897.

A stated meeting of the Feldman Collecting Social was held at the residence of Mr. H. W. Wenzel, 1509 S. 13th Street. Members present: Messrs. Castle, H. W. Wenzel, A. Hoyer, E. Wenzel, Seiss, Fox, Laurent Boerner and Schmitz.

Visitor: Mr. Stanley T. Kemp. Meeting called to order at 9 P.M., Vice-President Castle presiding. Minutes of the previous meeting approved as read. The Secretary and Treasurer read their annual reports, which, upon motion, were accepted and filed.

Mr. Hoyer exhibited a piece of pine wood, in which, while sawing it through, he discovered a burrow containing a carpenter bee, *Xylocopa virginica*, which, as could be seen, had just escaped the saw's teeth; the depth of the burrow was about seven inches. Mr. Fox made a few remarks concerning the habits of this species.

Mr. Laurent exhibited a specimen of *Bronchelia hortaria* var. *dendraria* from Gulf Hammock, Fla., and stated it was a southern form, and he doubted if it had ever been found in this part of the country.

Mr. Seiss stated that Mr. Kemp had taken a specimen of *Murgantia histrionica* in Camden, N. J., a few weeks ago in hibernation; this is a southern species and has gradually worked its way northward; it was reported from south Jersey about a year ago.

Mr. H W. Wenzel exhibited males and females of an interesting little species of Buprestid, *Xenorhipis brendeli*, bred by Mr. Edw. A. Klages, of Crafton, Pa., making special mention of the remarkable antennæ of the male.

Mr. Kemp stated that he had recently, for an experiment, lined some of his boxes with cork-carpet in place of cork, but that he concluded it made the boxes almost too heavy, and, that further, he found it difficult to pin specimens owing to the hardness thereof; however, he thought he would mention it, as some of the members might have intended trying it themselves. Continuing, Mr. Kemp reported the capture of several specimens of *Badister notatus* on Dec. 12, 1896, in Camden, N. J.; also *Casnonia ludoviciana* on April 4th, same place.

A communication was received from the retiring president, Mr. James H. B. Bland, stating that business would prevent him

from being a regular attendant at the meetings as heretofore. On motion of Mr. Laurent, Mr. Bland w s therefore unanimously elected an honorary member of the Social in recognition of his many years of labor in the interest of Entomology.

The following officers were elected to serve for the ensuing year: President, Dr. Horace G. Griffith; Vice-President, Dr. D. M. Castle; Treasurer, H. W. Wenzel; Secretary, Theo. H. Schmitz.

Mr. Stanley T. Kemp, of Camden, N. J., was proposed for active membership in the Social, the same to be acted upon at the next stated meeting, in accordance with Article V of the Constitution.

No further business being presented the meeting adjourned to the annex at 10.30 P.M. THEO. H. SCHMITZ, *Secretary.*

The Entomological Section

ACADEMY OF NATURAL SCIENCES, PHILADELPHIA.

PROCEEDINGS OF MEETINGS.

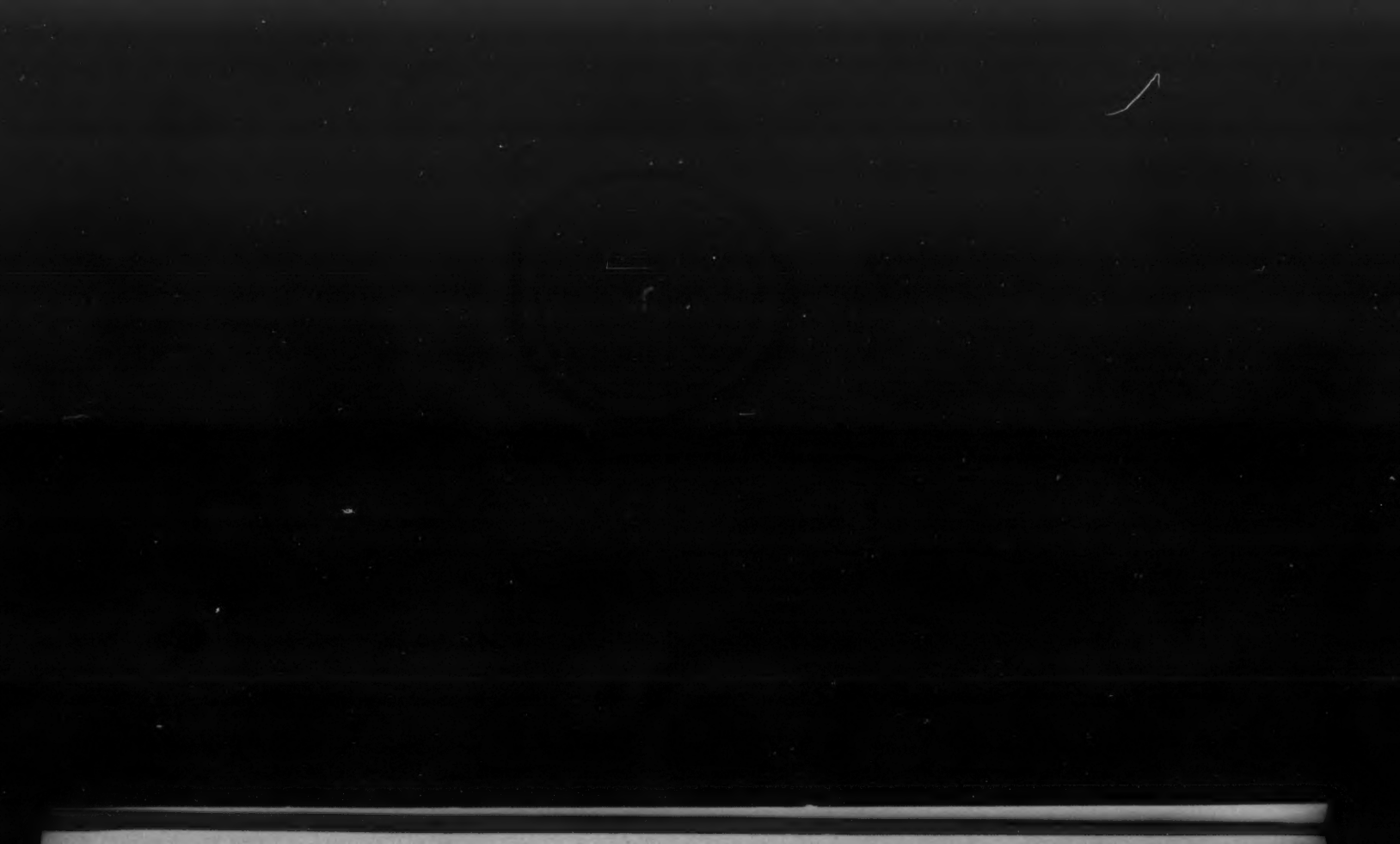
At the annual meeting held Dec. 17, 1896, the following persons were elected to serve as officers for the year 1897:

Director.—G. H. HORN, M.D.
Vice-Director.—C. S. WELLES.
Treasurer.—E T. CRESSON.
Recorder and Conservator.—H. SKINNER, M.D.
Secretary.—W. J. FOX.
Publication Committee.—C. W. JOHNSON, J. H. RIDINGS.

Mr. Herman Horning was elected an associate.

HENRY SKINNER, *Recorder.*

OBITUARY.

Dr. E. EPPELSHEIM, an authority Staphylinidæ, in Bavaria.

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